

**FACT SHEET FOR STATE WASTE DISCHARGE
PERMIT NO. ST-9148**

SNOQUALMIE WINERY

SUMMARY

The Snoqualmie Winery is located near Prosser, Washington. It began operation in 2002. The winery's parent company Stimson Lane, Ltd. is the largest producer of wines in Washington State. The facility is located at the site of the old Washington Frontier Juice operation and has been extensively retro-fitted to produce wines. The facility has two large lagoons which will provide treatment and evaporation of wastewater. The company has a contract with the City of Prosser to discharge excess wastewater to the City's WWTP.

The permit requires the company to submit an Engineering Report that examines the facility's lagoons for their long-term integrity with regards to protecting the State's ground water quality. An additional requirement of the report is to examine wastewater pollutant reduction opportunities at the facility.

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INTRODUCTION

This fact sheet is a companion document to the State Waste Discharge Permit No. ST-9148. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to waters of the State of Washington. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.162) requires that a permit be issued before discharge of wastewater to waters of the State is allowed. Regulations adopted by the State include procedures for issuing permits (Chapter 173-216 WAC), and water quality criteria for ground waters (Chapter 173-200 WAC). They also establish requirements which are to be included in the permit.

This fact sheet and draft permit are available for review by interested persons as described in Appendix A--Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix C--Response to Comments.

GENERAL INFORMATION	
Applicant	Stimson Lane, Ltd.
Facility Name and Address	Snoqualmie Winery 660 Frontier Road Prosser, WA 99350
Type of Facility	Winery
Type of Treatment	Aerated Lagoons
Discharge Location to Prosser WWTP sewer pipe	Latitude: 46° 13' 06" N Longitude: 119° 44' 51" W (WGS 84)
Contacts at Facility	Name: <u>Rob McKinley</u> – Operations Manager <u>Bill Hamlin</u> – Winery Process Engineer Telephone #: 509-786-1003 <u>Tom Sommerfeldt</u> -- Director of Safety and Environmental Affairs Telephone #: 509-875-2061
Responsible Official	Name: Doug Gore Title: Vice President of Operations

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

This 44,800 square-foot, winemaking facility and visitor center is located at 660 Frontier Road, about a quarter of a mile south of Interstate 82, and just east of Prosser off Highway 22.

The facility's wine storage tanks and fermenter tanks have a total capacity of over 2,400,000 gallons.

History

The former Washington Frontier Juice facility was purchased by Stimson Lane, Ltd. (Snoqualmie's parent company) in 2001. Washington Frontier Juice's State Wastewater Discharge Permit was transferred to Stimson Lane effective on September 3, 2001. Stimson Lane has replaced nearly all of Washington Frontier Juice's fruit processing equipment with wine making equipment.

In 2002, the Snoqualmie Winery had its first crush and wine making season. Ribbon cutting on the re-furbished facility was held on September 10, 2003.

Industrial Processes

The facility plans to crush 12,000 tons of grapes annually. Grapes are received on the south side of the plant, and dumped into a pit for initial crushing and removal of stems and seeds.

Much of the wine produced at the facility is finished at other facilities. The wine making process generates an average of 21,500 gallons per day of wastewater, with a maximum of 53,000 gallons per day anticipated. Most of the wastewater is generated during the rinsing out and cleaning of storage and fermenting tanks.

Treatment Processes

Stimson Lane will no longer use the orchard sprayfields adjacent to the facility that Washington Frontier Juice used for wastewater treatment. Tree fruit crops are being maintained on the former wastewater sprayfields with other sources of water.

All wash water and process wastewater from the facility buildings and outside storage tanks is discharged initially to an underground solids settling tank (sump) with an associated wet well pump. This sump is located between the process buildings and the aerated, single-lined lagoons.

The sump also collects stormwater from the facility's roofs and parking lots. The permit includes a requirement for an Engineering Report, a section of which is to address opportunities for

wastewater reduction (S6.E). The facility should examine methodologies of segregating the stormwater out of the process water stream, in order to reduce hydraulic loading in the wastewater discharge to the City of Prosser's wastewater treatment plant (WWTP).

From the solids settling sump, wastewater is pumped to a 3.5 million gallon (west) lagoon and/or a 6 million gallon (east) lagoon. Wastewater can flow through an equalization pipe between the two lagoons. The smaller east lagoon has three 15 horsepower aerators, while the larger west lagoon has four 15 horsepower aerators. The lagoons are projected to evaporate much of the wastewater produced on an annual basis.

A wastewater treatment plan, entitled Snoqualmie Winery Treatment Summary (2002), has been prepared for the winery by SCM Consultants, Inc. The report projects that the lagoons at the winery will have sufficient volume for three years of influent capacity prior to reaching capacity. Starting in December 2007, the report projects that the facility will have to discharge about 1,852,000 gallons annually to the City's WWTP, in order to have enough capacity for wastewater generated during the fall crush.

Wastewater can be removed from the lagoons by a suction piping system to a pump house located at the southeast corner of the large lagoon. At the pump house, the wastewater can be drawn from either the small lagoon and pumped into the large lagoon or drawn from both (or either) lagoons and pumped to the City's sewer main along Frontier Road. Wastewater pumped to the City's sewer will be composite sampled and flow metered at a small building just north of the small lagoon.

The winery has a contract (dated April 2003) with the City of Prosser to discharge its wastewater to the City's WWTP when the lagoons reach capacity. All piping, flow metering, and composite sampling for the discharge to the Prosser WWTP was operational prior to the 2003 season's grape crush. The option of discharging to the WWTP (prior to 2007) assures maximum operational reliability of the wastewater treatment system.

GROUND WATER

The facility's two lagoons are single lined with polyethylene and have no leak detection in place. Therefore, the Permittee will be required to submit a Hydrogeologic Report as a portion of a required Engineering Report (S6) in order to demonstrate protection of ground water quality.

The previous owners of the facility utilized nearby monitoring wells (located off the property) to track ground water quality associated with their wastewater sprayfields. An important aspect of the Hydrogeologic Report is to examine if these monitoring wells are adequately located to determine if the lagoon's liners are leaking.

PERMIT STATUS

An application for a permit was submitted to the Department on May 22, 2003 and accepted by the Department on June 20, 2003. The temporary permit became effective August 9, 2003.

SUMMARY OF COMPLIANCE WITH THE TEMPORARY PERMIT

The facility last received an inspection on August 19, 2003.

Since commencing operation in 2002, the Permittee has remained in compliance based on the requirements of the temporary permit and other reports submitted to the Department and the inspection conducted by the Department.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported from a single influent composite sample and a single effluent grab sample from the lagoon. The wastewater is characterized for the following parameters:

Table 1: Wastewater Characterization

Parameter	Influent Concentration (mg/L)	Wastewater from Large Lagoon (mg/L)
BOD ₅	14,674	440
Total Dissolved Solids	5,240	1,697.7
TKN	71.3	37.5
NO ₃ ^a	67.5	<0.2
Chloride ^a	15.2	54.0
pH	Influent grab sample -- 4.01	Lagoon grab sample --7.92
^a The laboratory reported that both the NO ₃ and chloride results may be less than reliable due to the color and nature of the sample. Further testing will be done to be assured of the concentration of the two parameters.		

PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be either technology- or water quality-based. Wastewater must be treated using all known, available, and reasonable methods of prevention, control and treatment (AKART) and not pollute the waters of the State. The minimum requirements to demonstrate compliance with the AKART standard are to be determined in an engineering report, in conformance with *Guidelines for the Preparation of*

Engineering Reports for Industrial Wastewater Land Application Systems, May 1993. The Engineering Report is required to be submitted by **May 1, 2005**.

The more stringent of the water quality-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring AKART for discharges to waters of the State (WAC 173-216-110). The following permit limitations are necessary to satisfy the requirement for AKART: the pH of the discharge to the City of Prosser WWTP shall not be less than 5.0 standard units or greater than 11.0 standard units. These pH limits are based on federal and state pretreatment standards.

Technology-Based Limits Developed by Engineering Report

The Engineering Report (S6) is required to consider the lagoon's long term integrity with regards to effects potential leaks have on ground water quality. The permit requires a section of the report examine pollution prevention and wastewater generation reduction opportunities at the facility. The report may recommend tech-based limits for the discharge to the lagoons, in order to assure protection of ground water quality and the City's WWTP.

GROUND WATER QUALITY-BASED LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington's ground waters including the protection of human health, WAC 173-200-100 states that waste discharge permits shall be conditioned in such a manner as to authorize only activities that will not cause violations of the Ground Water Quality Standards. Drinking water is the beneficial use generally requiring the highest quality of ground water. Providing protection to the level of drinking water standards will protect a great variety of existing and future beneficial uses.

Applicable ground water criteria, as defined in Chapter 173-200 WAC and in RCW 90.48.520 for this discharge, include the following:

Table 2: Ground Water Quality Criteria

Parameter	Criterion
Total Coliform Bacteria	1 Colony/ 100 mL
Total Dissolved Solids	500 mg/L
Chloride	250 mg/L
Sulfate	250 mg/L
Nitrate	10 mg/L
pH	6.5 to 8.5 standard units
Manganese	0.05 mg/L
Total Iron	0.3 mg/L
Toxics	No toxics in toxic amounts

The Total Dissolved Solids in a domestic well located ¼ mile down-gradient (north) of the lagoons has at times exceeded State Ground Water Quality Standards. The previous Permittee's (Washington Frontier Juice) sprayfield may have contributed to these exceedances. In order to differentiate the effects potential leaks in the lagoons have on ground water quality from the effects of the previous Permittee's sprayfield, an Engineering Report (with Hydrogeologic Study) (S6) is required to be prepared. Based on the findings of the report, ground water quality-based permit limits may be recommended.

EFFLUENT LIMITATIONS BASED ON USER CONTACT

In order to protect City of Prosser Wastewater Treatment Facility from pass-through, interference, or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by City of Prosser and codified in ordinance. Applicable limits for hydraulic and organic loadings for wastewater discharges from the facility's lagoons to the City's sewer main along Frontier Road at latitude 46° 13' 06" N and longitude 119° 44' 51" W (WGS 84).

The contract limits are given in the City of Prosser Industrial Wastewater User Contract - Snoqualmie Winery; Schedule A – Allowable Wastewater Discharges, which has been in effect since April 2003. The User Contract also specifies that pH of the discharges be no lower than 5 and no higher than 11. This contract is subject to revision, therefore the contract limits are not placed in the permit document, but rather in an update to the O&M Manual. The current Schedule A is presented in the table below.

Table 3: User Contract - Snoqualmie Winery

Maximum Monthly Allocation Based on Industrial User Contract			
Month	Average Daily Flow (GPD)	Average Daily BOD Loading (lbs/day)	Average Daily TSS Loading (lbs/day)
January	50,000	209	500
February	50,000	209	500
March	50,000	209	500
April	50,000	209	500
May	50,000	209	500
June	50,000	209	500
July	50,000	209	500
August	50,000	209	500
September	0	0	0
October	0	0	0
November	0	0	0
December	50,000	209	500

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, that ground water criteria are not violated, and that effluent limitations are being achieved (WAC 173-216-110).

WASTEWATER MONITORING

The monitoring schedule is detailed in this permit under Special Condition(s) S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

GROUND WATER MONITORING

The monitoring of ground water at the site may be required in accordance with the Ground Water Quality Standards, Chapter 173-200 WAC. The Department has determined that this discharge has a potential to pollute the ground water. Therefore, the Permittee is required to evaluate the impacts of its operation on ground water quality. Monitoring of the ground water at the site boundaries and within the site may be an integral component of such an evaluation. The hydrogeologic study portion of the Engineering Report (S6) is required to determine the specifics of the ground water monitoring plan.

SAMPLING AND ANALYSIS PLAN

The permit also requires the submittal of a Sampling and Analysis Plan (S2.C). The plan should address all wastewater and groundwater monitoring required by the permit. The ground water monitoring portion of the plan is contingent on the specifics of the Engineering Report with Hydrogeologic Study (S6).

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of Special Condition S3. are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 273-216-110).

OPERATIONS AND MAINTENANCE

This permit contains Special Condition S5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the State from leachate of solid waste.

This permit requires, under authority of RCW 90.48.080, that the Permittee develop and submit to the Department a solid waste plan to prevent solid waste from causing pollution of waters of the State. The plan must also be submitted to the local solid waste permitting agency for approval, if required by local ordinance.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

This permit requires the Permittee to develop and implement a plan for preventing the accidental release of pollutants to State waters and for minimizing damages if such a spill occurs.

ENGINEERING REPORT WITH GROUND WATER QUALITY EVALUATION

In accordance with WAC 173-200-080, the permit requires the Permittee to prepare and submit an Engineering Report for Departmental approval (S6).

Wine making wastewater characteristically possesses high concentrations of constituents with biological oxygen demand, low pH, as well as high concentrations of total dissolved solids. This type of wastewater has a potential to degrade ground water quality. A key goal of this report is to determine "all known, available, and reasonable methods of prevention, control, and treatment" (AKART) are for the facility's wastewater generation. State regulations require that wastewater be treated to this standard; therefore the permit requires a section of the report examine pollution prevention and wastewater generation reduction opportunities at the facility.

The Engineering Report is required to consider the lagoon's long term integrity with regards to effects potential leaks have on ground water quality; therefore, the report shall detail plans to assure protection of ground water quality with a hydrogeologic study. The hydrogeologic study is required to be based on the site's soil and hydrogeologic characteristics and be capable of assessing impacts on ground water. The study will be prepared using "*Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems*," Ecology 1993.

The permit requires the submittal of a scope of work that outlines the timetable and expenditures necessary for achieving the objectives of study.

GENERAL CONDITIONS

General Conditions are based directly on State laws and regulations and have been standardized for all industrial waste discharge to ground water permits issued by the Department.

Condition G1. requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2. requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3. specifies conditions for modifying, suspending or terminating the permit. Condition G4. requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5. requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6. prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7. and G8. relate to permit renewal and transfer. Condition G9. requires the payment of permit fees. Condition G10. describes the penalties for violating permit conditions.

RECOMMENDATION FOR PERMIT ISSUANCE

This permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, and to protect human health and the beneficial uses of waters of the State of Washington. The Department proposes that the permit be issued for **five** years.

REFERENCES FOR TEXT AND APPENDICES

Faulkner, S.P., Patrick Jr., W.H., Gambrell, R.P., May-June, 1989. Field Techniques for Measuring Wetland Soil Parameters, Soil Science Society of America Journal, Vol. 53, No.3.

Washington State Department of Ecology, 1993. Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems, Ecology Publication # 93-36. 20 pp.

Washington State Department of Ecology.

Laws and Regulations(<http://www.ecy.wa.gov/laws-rules/index.html>)

Permit and Wastewater Related Information

(<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>)

Washington State Department of Ecology, 1996. Implementation Guidance for the Ground Water Quality Standards, Ecology Publication # 96-02.

APPENDIX A -- PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on July 2, and July 9, 2003 in the Prosser Record Bulletin to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department published a Public Notice of Draft (PNOD) on February 18, 2004 in the Prosser Record Bulletin to inform the public that a draft permit and fact sheet were available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator
Washington State Department of Ecology
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, 509/457-7105, or by writing to the address listed above.

This permit was written by Jim Leier.

APPENDIX B -- GLOSSARY

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation--The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the Federal Clean Water Act.

Bypass--The intentional diversion of waste streams from any portion of the collection or treatment facility.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the eighty (85) percent removal requirement. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-

composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring --Uninterrupted, unless otherwise noted in the permit.

Distribution Uniformity--The uniformity of infiltration (or application in the case of sprinkle or trickle irrigation) throughout the field expressed as a percent relating to the average depth infiltrated in the lowest one-quarter of the area to the average depth of water infiltrated.

Engineering Report--A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Soil Scientist--An individual who is registered as a Certified or Registered Professional Soil Scientist or as a Certified Professional Soil Specialist by the American Registry of Certified Professionals in Agronomy, Crops, and Soils or by the National Society of Consulting Scientists or who has the credentials for membership. Minimum requirements for eligibility are: possession of a baccalaureate, masters, or doctorate degree from a U.S. or Canadian institution with a minimum of thirty (30) semester hours or forty-five (45) quarter hours professional core courses in agronomy, crops or soils, and have five (5), three (3), or one (1) year(s), respectively, of professional experience working in the area of agronomy, crops, or soils.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria--A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids--That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent pollution of the receiving water.

APPENDIX C -- RESPONSE TO COMMENTS

The City of Prosser submitted the following comments to this permit:

Comment:

Section S1.A. Effluent Limitations – Discharge to Prosser WWTP, “Effluent Limitations” table 5: The requirements for pH limits listed in footnote b of the table are not included in the contract between the City and Snoqualmie Winery. We ask that footnote b be deleted from the permit. This requirement will require continuous pH monitoring and data logging, and rigorous data review to determine permit compliance.

Ecology’s Response:

The change is made as requested.

Comment:

Section S2.A2. Wastewater Monitoring to Prosser WWTP, page 7: The last part of the first sentence of the section should be revised to read “...between the lagoons and the City’s gravity sewer that lies beneath Frontier Road.”

Ecology’s Response:

The change is made as requested.

Comment:

Section S2.A2. Wastewater Monitoring to Prosser WWTP, Effluent to the City of Prosser POTW” table page 7: To match the monitoring done by the City, the sampling frequency for pH should be changed to “Weekly”, and the sample type changed to “24 hour composite.” We also monitor industrial discharges for ammonia. Therefore, we ask that monitoring for ammonia be included in the table. Units, sample point sampling frequency, and sample type would be the same as for BOD and TSS, in units of mg/L and lbs/day.

Ecology’s Response:

The change is made as requested.

Comment:

Section S4.A. O&M Manual, “Wastewater Depth Limitations –Lagoons” table 12: Both lagoons listed in the table are labeled “East.” We understand the East Lagoon is 216 inches deep, and the West Lagoon in 165 inches deep.

Ecology’s Response:

The correction is made as requested.